

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: May 28, 1996  
Date Received: May 23, 1996  
Project: 7238, Metro Self Monitor, PO #M72161  
Date Samples Extracted: May 24, 1996  
Date Extracts Analyzed: May 24, 1996

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR CHROMIUM, COPPER, NICKEL, ZINC  
USING METHOD 6010**

**Samples Processed Using Method 3005A**  
Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M72161	0.39	0.35	0.36	0.07
Method Blank	<0.05	<0.05	<0.05	<0.05

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**QUALITY ASSURANCE RESULTS  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Laboratory Code: 69178(Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.39	0.41	5	0-20
Copper	mg/L (ppm)	0.35	0.42	18	0-20
Nickel	mg/L (ppm)	0.36	0.37	3	0-20
Zinc	mg/L (ppm)	0.07	0.10	35a	0-20

Laboratory Code: 69178(Matrix Spike)

Analyte:	Reporting Units	Spike Level	Sample Result	% Recovery		Acceptance Criteria	Relative Percent Difference
				MS	MSD		
Chromium	mg/L (ppm)	5	0.39	99	100	80-120	1
Copper	mg/L (ppm)	5	0.35	101	101	80-120	0
Nickel	mg/L (ppm)	10	0.36	97	98	80-120	1
Zinc	mg/L (ppm)	5	0.07	91	89	80-120	2

Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Recovery		Acceptance Criteria	Relative Percent Difference
			MS	MSD		
Chromium	mg/L (ppm)	5	103	102	80-120	1
Copper	mg/L (ppm)	5	106	106	80-120	0
Nickel	mg/L (ppm)	10	100	101	80-120	1
Zinc	mg/L (ppm)	5	91	93	80-120	2

a - The analyte was detected at a level less than five times the detection limit. The RPD results may not provide reliable information on the variability of the analysis.

5.23.96  
10:40

AKC-0012197

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Andrew John Friedman  
James E. Bruya, Ph.D.  
(206) 285-8282

3012 16th Avenue West  
Seattle, WA 98119-2029  
FAX: (206) 283-5044

May 28, 1996

**INVOICE # 96ACU0528-2  
DUPLICATE COPY**

Accounts Payable  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

RE: Project 7238, Metro Self Monitor, PO #M72161: Results of testing requested  
by Gerald Thompson, Project Manager for material submitted on May 23,  
1996.

1 water sample analyzed for  
Chromium, Copper, Nickel, Zinc  
using Method 6010 @ \$65 per sample

\$ 65.00

Amount Due .....

\$ 65.00



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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James E. Bruya, Ph.D.  
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FAX: (206) 283-5044

May 28, 1996

Gerald Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

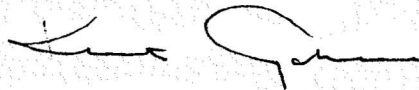
Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on May 23, 1996 from your 7238, Metro Self Monitor, PO #M72161 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Kurt Johnson  
Chemist

keh  
Enclosures  
ACU0528R.DOC